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Hugh Holmes McGuire's — Virg.a

Thesis

Tetanus

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It is usual in a dissertation on any particular disease, to commence with the origin and different views maintained by different writers, on it; and it is customary to render their dissertations tiresome, and consequently irksome to the reader, by giving the Pathological views of some whose Theory is palpably replete with error and devoid of sense; perhaps the same author will compute the same theory, in the same page; the utility of thus prolonging dissertations, I cannot conceive, as it serves only to confuse the mind of a student: to prevent myself from falling into the same mistake I have neglected stating the views of any writer but the most modern.

Tetanus is a disease which was known by the most ancient Physicians, but their views of it were incorrect, consequently their practice unsuccessfull. Frustrated in their attempts to cure this disease, and yet con-

idering it under the power of medicine
much attention was the consequence of it.
and although so much attention was paid
to it there has not been any certain man
=ner of treatment discovered of relieving the
unfortunate sufferer or obviating its fatal tendency.
To see a fellow creature tortured with the Lock Jaw
produced perhaps by a slight puncture
is racking to the feelings of the most
obdurate, and it has been the lot of the
writer of this dissertation to witness its
fatality in several cases. Tetanus occurs most
frequently in the South, although there are spo=
=radic cases every where. In this Country it very seldom
occurs, except in the warmest Seasons & in the
Southern States. It is said to be most common
in the West Indies and chiefly among the negroes
Dr Thomas accounts for it being more com=
=mon among them on account of their being more
exposed to wounds of the feet from going

usually barefooted. It occurs in both sexes, of all ages and Temperaments, and is said to attack the male, more than the female; but I presume this does not arise from any peculiarity in the Male, but from being more exposed than the female. It has been also observed to attack the robust more than those of a debilitated constitution. I have known a family of negroes consisting, of four brothers, die with this disease a peculiarly strange and unaccountable: they were generally of a healthy, robust and apparently of a good constitution; No peculiarity externally was observed, No dissection was made of either: The first one, a victim to this disease, was produced by the extraction of a tooth: The Second received a wound from the wheel of a wagon. I was not informed what course of practice was observed on these two cases, but upon the following, the Stone Opium and Mercury were freely used

The third received a wound in his heel from a nail; it was poulticed and apparently was getting well, when he was observed to throw his head upon his shoulders with some violence: these symptoms at first pro-duced no alarm, untill their frequency made it necessary to send for a Physician who advised Opium and Mercury, both were used, but the symptoms became more aggravated every day untill he died. The fourth of them received a wound in his arm about the middle, the ball flaped up the arm, and was extracted on the shoulder. The wound suppurated; and apparently was getting well, when he felt pain at the precordia, which was soon succeeded by spasmodic contraction; and often symptoms of Tetanus which terminated his exis-tence. Perhaps it will be considered that all these accidents were sufficient to

produce Tetanus, I admit it. but at the same time, I think it strange if there was not an hereditary predisposition to this disease. that four brother's should die with a disease so rare as Tetanus; I think the only just inference from these cases, is; that there was an idiosyncrasy, which predisposed them to Tetanus, what that idiosyncrasy was, whether in the muscles, nerves or where, I do not pretend to say, but submit the fact to those whose qualification of judging are superior to mine.

The division of this disease has been unnecessary minute; to give a peculiar and distinct name to every part of the system labouring under the same affection, would render the science of medicine so replete with Technical terms, as to require the labour of an age, to obtain a knowledge of it. It should be the object of a writer to render their subjects as

perspicuous as possible, and to avoid Technical terms when plain words can be substituted, for them. The division of Tetanus into Opisthotonus, Emprosthotonus and Pleurosthotonus is of no importance, either in a practical or Scientifical view, for Science does not consist in superfluous words. The only division necessary is into Idiopathic and Symptomatic: the last of this division is by far the most common, the other being scarcely known in this country. Idiopathic Tetanus is generally produced by cold, a moisture applied to the body while it is very warm producing a sudden suppression of perspiration. when it is produced by cold it commonly makes its appearance in a few days after the application of it: the first symptom is a sense of stiffness in the neck, which increases, and causes pain when the head is moved. Accompanied with this rigidity is a pain

at the root of the tongue, attended with difficult deglutition; there is also pain at the lower part of the Sternum; this pain frequently extends into the back, and causes a retraction of the head: at the same time the muscles of the lower jaw which are at first rigid are now affected with a most violent spasm, and set the teeth so close together, as not to admit any thing into the mouth. The muscles which are affected in this disease are the Flexors and Extensors of the lower extremities the muscles of the arm, except those that move the wrists and fingers: the Pectoral & Deltoid are violently contracted, so that, the shoulders are hulled towards the ears: the muscles are often drawn towards the ears, and the teeth exposed: frequently an object, as much like any thing else as a human being; this continual spasm may well be imagined not to continue long without

an abatement of its violence or death: after an abatement of this spasm, the patient is left weak, and exhausted, with a stertorous breathing as if he had been most excessively exercised. During the interval of the spasm the face is flushed, although sometimes pale and expressive of the most melancholy despair. The stomach too is very much out of order, for if food be administered an emesis of it imediately takes place. In a case of Tetanus, where the jaws had been lock several days, I wished to give some nourishment to the patient, during the suspension of a spasm. I preceded the administration of it by the Spirit of Turpentine, no spasm was produced and the food remained on the stomach attended with a happy effect. During those attacks of spasm, the whole system, must sympathise and put on unnatural appearance, the pulse

is contracted, hurried, & intermittent; respiration is affected in the same manner: the heat of the body is not generally increased: if blood is drawn at this state of the disease it exhibits a dissolved state, or in other words loss of vitality. this may be the case in the generality of Lock Jaws but in one case in which I used the lancet very freely, it was of an arterial colour: but it was not dissolved, or did it coagulate sooner than blood in a healthy state. the appearance of the tongue is not unnatural, the urine is generally high coloured.

The appearance of the sufferer at the cadaverous period, might well be supposed to sanction the belief of an observer, that his suffering had risen to their acme but it is not so: the interval of the spasm become shorter and shorter, each one with increased pain, and additional symptoms

for at this time a copious sweat flows. Circulation becomes indistinct: the pulsations of the heart are increased both in frequency and force: the jaws are locked so fast as not to admit the least nourishment: and ~~the~~ even respiration of breath is denied the unfortunate sufferer. At this period: Delirium comes on succeeded by a continual spasm, which closes the scene sometimes convulsions bring on the tragic end. Tetanus is a rapid disease and generally terminates on the fourth or fifth day, if the sufferer survives those critical days his chance of recovery is increased; his recovery will be slow, tedious, and not for several month's will his health be restored

The pathology of this disease is not yet understood, the contraction and rigidity of the muscles, caused by morbid excitement, either immedeately applied to them, or by the laws of sympathetic action (the excitement being

applied to an other part; we are unacquainted with; consequently, to practice on a scientific plan, would be a vain attempt, we are necessarily obliged to be satisfied with practicing from analogy confirmed, by experience; The practice which has succeeded best, is as soon as possible to produce a Mercurial Ptyalism; to effect this it must be used in the commencement of the disease, and used in large quantities; to moderate the spasm, & as palliatives, Opium and Wine must be liberally prescribed. I conceive in the cases I have seen, the spasm has been moderated more by Blood-Letting than either Opium or Wine. In one case the pains were both for days; during a very severe spasm I took away from her arm a pint of blood, the spasm appeared to be for a minute, relaxed when it suddenly came on again, she placed her arm under her, and while in that

situation the bandage was removed, she bled without being observed, as was supposed, re-quart, she appeared very much sunk; pulse scarcely perceptible," succeeded in stop-ping the bleeding, and gave her a table spoon full of Spirit of Turpentine; in less than ten minutes afterwards, her jaws became relax-ed together with the whole system; I afterwards gave her Spirit of Turpentine three times a day, and she had not any return of her disease; her recovery was remarkably fast, using no medicine to prevent a relapse but the Spirit of Turpentine

When the use of Opium is determined upon which should be in every case as an auxi-liary in relieving and moderating the spasm, it should be given in very large and repeated doses, for it will not effect the system without using it in much larg-er doses than is given in other diseases

and its effects being soon over it should be frequently administered: Its operation in these cases are not similar to its operation in other diseases: for although it allays the spasm it does not produce sleep, nor that stupor or intoxication, which in other circumstances it does. We should also always commence the administration of it, in the beginning of the disease, and use it in very large doses, for as the disease advances deglutition becomes difficult, consequently the administration of it, is attended with inconvenience. Dr Cullen thinks the effects of Opium are often lost by the Practitioner being afraid of administering too much. The bowels are affected with spasm in this disease consequently costiveness is to be prevented. Several cases are stated to have been entirely relieved by the use of Cathartics. Dr Armstron most strenuously recommends their use. which was adopted and followed with success by the

enlightened professor of the practice of medicine in a case of Tetanus produced by a collection of heavy stools in the intestines. when it arises from a collection of undigested feces, or any indigestible substance in the intestines, there can be no doubt of the propriety of this practice but acknowledge my inability to comprehend how it will act so that its action will be be beneficial in Idiopathic Tetanus.

Much attention ought to be paid to the cause of Symptomatic Tetanus, when it is produced by a simple wound, it should be enlarged with a scalpel and irritating applications to the part, to produce inflammation, and suppuration as soon as possible; the most useful for which purpose is Spirits of Turpentine, but by Dr. Not a little has been said of the restorative powers of the cold bath, the particular period when it would be attended with good effects has not been ascertained: and until

it is ascertained it may be considered a doubtful remedy. In that particular form of Tetanus denominated Trismus Nascentium, it has been used, but the warm bath is preferred. The treatment of this form of Tetanus, has been lately, to use the mullein (verbascum) bath, as soon as the spasm comes on to emerge the child in this bath: in three or four minutes the spasm is relieved, profuse perspiration breaks out, together with a very great inclination to sleep. after the child awakes, it appears entirely well, but there is great danger of a relapse, and the bath must be used as a preventive

Gentlemen of the Faculty

I am well aware of the defeciences of this my dissertation, and I submit it to your perusal with that diffidence which will naturally be excited. Conscious of my inability to give any thing new to a disease which has hitherto baffled those whose qualifications are superior to mine

consequently I would be doing an injustice, to myself, as well as to those, from whom I have extracted my ideas, on this subject, were I to claim any originality in it. my view solely was to communicate the cases that came under my own personal observation, with the different forms & varieties the disease assumed; & the practice which succeeded best. In stating these cases, do not for a moment suppose that I consider the cases I have mentioned sufficient to justify the prosecution of the practice, I adopted: willingly will I yeild to your superior judgment, but I would be doing an injustice to myself, as well as the world at large did I not communicate them If the ideas I have imbibed are erroneous I wish to have them set aright. If they are right I am more than recompensed by your approbation